Climax Molybdenum
A Phelps Dodge Company

Climax Molybdenum Company
P.O. Box 220
Fort Madison, Iowa 52627
(319) 463-7151

October 2, 2006

06ENV-043

US EPA Region 7
Federal Building
210 Walnut Street, Room 473
Des Moines, IA 50309-2109
Attn: Gary Witkovski

Subject: Climax Molybdenum Company EPA RCRA ID# IAD000222653
TCLP Data for RCRA Audit Performed on 08/22/2006

Dear Mr. Witkovski,

The enclosed documents are the toxicity characteristic leachate procedure analytical results from the University Hygienic Laboratory (UHL) for the materials that you requested during your facility inspection on August 22, 2006. Representative samples of the spent parts washer solvent (Electra 221) and the maintenance shop baghouse dust were submitted to the UHL. The results demonstrate that neither of the samples exhibit the toxicity characteristic. These results will be attached to our existing waste characterizations already on file for these materials.

If you have any questions, please contact me at (319) 463-2224.

Sincerely,

Scott Ickes
Manager of QA and Environmental Affairs
Climax Molybdenum Co.

cc: James Aycock

THE UNIVERSITY OF IOWA

Toxicity Characteristic Leaching Procedure (TCLP)

EPA Method 1311

Section 1.2 "If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run."

when the solid is analyzed & NOT extracted.

TCLP Metals:

Less than 100 mg/Kg	Pb, Cr, As, Ag	will not exceed the 5 mg/l TCLP limit
Less than 20 mg/Kg	Cd, Se	will not exceed the 1 mg/L TCLP limit
Less than 2000 mg/Kg	Ba	will not exceed the 100 mg/L TCLP limit
Less than 4 mg/Kg	Hg	will not exceed the 0.2 mg/L TCLP limit

Minimum required sample size is 150 g , however it is always better to have more in the event the extraction or analysis needs to be repeated for some reason.

The University Hygienic Laboratory will provide clean glass jars or plastic containers, however if the analysis is for metals only, a large clean plastic bag will be accepted. Plastic containers cannot be used if the sample will be analyzed for pesticides or organic compounds. If the sample contains large pieces of material, the particle size will need to be reduced to less than 9.5 mm.
Sampling information forms will also be provided. Please indicate the analyte as total or as TCLP procedure. You may also specify analysis as total and only if elevated run the full TCLP.
When the analyte is total Lead (Pb) the result is routinely reported as percent by weight. You may specify results in mg/Kg to facilitate comparison. All other metals are routinely reported in mg/Kg.

TAB 5/99

HYGIENIC LABORATORY

Henry A. Wallace Building
Des Moines, Iowa 50319

Iowa's Environmental and Public Health Laboratory

Telephone: 515/281-5371
Telefax: 515/243-1349
http://www.uhl.uiowa.edu

Hygienic Laboratory

The University of Iowa

Date of report: 09-28-2006

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
PO BOX 220
FORT MADISON IA 52627

Sample Number	**200663789**
Date Received	08-25-2006
Project	
Date Collected	08-24-2006 06:00
Collection Site	climax molybdenum co.
Collection Town	Fort Madison
Description	parts washing fluid-used
Reference	ELECTRA 221
Collector	BARTHOLOEW JOE
Phone	(319) 463-2222
Purchase Order	F21593

Comments: *Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.*

Results of Analyses

Total Barium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Barium	0.31	0.05

Date Analyzed: 09-20-2006
Method: EPA 200.7
Analyst: DC
Verified: DS

Total Cadmium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Cadmium	0.07	0.05

Comments: *The quantitation limit is adjusted for the amount of sample analyzed.*

Date Analyzed: 09-20-2006
Method: EPA 200.7
Analyst: DC
Verified: DS

Total Chromium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Chromium	1.2	0.05

Comments: *The quantitation limit is adjusted for the amount of sample analyzed.*

Date Analyzed: 09-20-2006
Method: EPA 200.7
Analyst: DC
Verified: DS

Total Silver

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Silver	0.23	0.05

Comments: *Analysis reported at higher quantitation limit due to matrix interference.*

Date Analyzed: 09-21-2006
Method: EPA 200.8
Analyst: SB
Verified: DS

Page 1 - Continued on next page

Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

http://www.uhl.uiowa.edu

Iowa Laboratories Complex
2220 S. Ankeny Blvd, Ankeny, Iowa 50023
515/725-1600 Fax: 515/725-1642

Total Arsenic

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Arsenic	<0.05	0.05
Comments	*Analysis reported at higher quantitation limit due to matrix interference.*	

Date Analyzed: 09-21-2006
Method: EPA 200.8
Analyst: SB
Verified: DS

Total Selenium

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Selenium	0.25	0.05
Comments	*Analysis reported at higher quantitation limit due to matrix interference.*	

Date Analyzed: 09-21-2006
Method: EPA 200.8
Analyst: SB
Verified: DS

Total Lead

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Lead	8.0	0.50
Comments	*The quantitation limit is adjusted for the amount of sample analyzed.*	

Date Analyzed: 09-20-2006
Method: EPA 200.7
Analyst: DC
Verified: DS

Total Mercury

Analyte	Concentration mg/L	Quantitation Limit mg/L
Total Mercury	<0.0002	0.0002

Date Analyzed: 09-14-2006
Method: EPA 245.2
Analyst: MP
Verified: SB

Description of units used within this report

mg/L - Milligrams per Liter

Quant Limit - Lowest concentration reliably measured

Iowa Laboratory Certification No. 027. AIHA, NELAP, USEPA, NVLAP #101288-0 and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.

Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

http://www.uhl.uiowa.edu

Iowa Laboratories Complex
2220 S. Ankeny Blvd, Ankeny, Iowa 50023
515/725-1600 Fax: 515/725-1642

Hygienic Laboratory

The University of Iowa

Date of report: 09-28-2006

CLIMAX MOLYBDENUM COMPANY
2598 HIGHWAY 61 SOUTH
PO BOX 220
FORT MADISON IA 52627

Sample Number	**200663790**
Date Received	08-25-2006
Project	
Date Collected	08-24-2006 06:00
Collection Site	climax molybdenum co.
Collection Town	Fort Madison
Description	welding hood barrel
Reference	
Collector	BARTHOLOEW JOE
Phone	(319) 463-2222
Purchase Order	F21593

Comments: *Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.*

Results of Analyses

TCLP Extraction

Analyte	Concentration pH Units	Quantitation Limit pH Units
Leachate pH	5.3	

Date Analyzed: 09-05-2006
Method: EPA 1311

Analyst: MC
Verified: LF

Toxicity Characteristic Leaching Procedure (TCLP)

Analyte	Leachate mg/L	Regulatory Level mg/L	Method	Analyst/ Verifier	Date Analyzed
Arsenic	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Barium	<10.0	100.0	EPA 1311/6020	SB/TAB	09-10-2006
Cadmium	<0.10	1.0	EPA 1311/6020	SB/TAB	09-10-2006
Chromium	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Lead	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006
Mercury	<0.02		EPA 1311/7471A	MP/SB	09-26-2006
Selenium	<0.10	1.0	EPA 1311/6020	SB/TAB	09-10-2006
Silver	<0.50	5.0	EPA 1311/6020	SB/TAB	09-10-2006

Description of units used within this report

mg/L - Milligrams per Liter
pH Units - pH Units
Quant Limit - Lowest concentration reliably measured

Iowa Laboratory Certification No. 027. AIHA, NELAP, USEPA, NVLAP #101288-0 and other credentials available upon request.

If you have any questions please call Sherri Marine at 800/421-IOWA (4692) or 319/335-4500. Thank you.

Mary J. R. Gilchrist, Ph.D.
Director

102 Oakdale Campus, #101 OH
Iowa City, Iowa 52242-5002
319/335-4500 Fax: 319/335-4555

http://www.uhl.uiowa.edu

Iowa Laboratories Complex
2220 S. Ankeny Blvd, Ankeny, Iowa 50023
515/725-1600 Fax: 515/725-1642

Climax Molybde
A Phelps Dodge Company
P.O. BOX 220 • FORT MADISON, IOW

CERTIFIED MAIL™

7003 3110 0005 9922 7096

FORT MADISON
OCT 4 '06
IOWA

U.S. POSTAGE
≈4.64
PITNEY BOWES
METER
2825379

US EPA Region VII
Federal Building
210 Walnut Street, Room 473
Des Moines, IA 50309-2109

Attn: Mr. Gary Witkovski